

NetStax™ ESDK

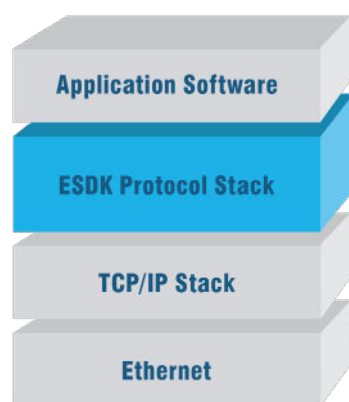
ETHERNET/IP SCANNER DEVELOPERS KIT

Benefits:

- Tested with ODVA CT19
- Field Proven for over 20 years
- High performance
- Simplified porting
- Minimized resource use
- Scalable

ESDK Contains:

- EtherNet/IP Scanner Class Protocol Stack 'C' Source Code designed for portability
- ESDK Scanner DLLs (32 & 64 bit) with C++ function call API, C# API for Windows / .NET applications
- ESDK Getting Started, Software Reference Manuals, and Porting Guide
- Scanner Class example code
- Sample Platform files
- Sample EDS files
- Sample SOC files for pre-conformance testing



PYRAMID
SOLUTIONS

ENABLING CONFORMANT ETHERNET/IP CONNECTIVITY

Pyramid Solutions' NetStax™ EtherNet/IP Scanner Developers Kit (ESDK) allows you to quickly introduce conformant EtherNet/IP Scanner Class and/or Adapter Class functionality for your products.

Our ESDK provides I/O server, I/O client, message server, and message client functionality along with an Application Programming Interface (API) for using Common Industrial Protocol (CIP) over standard Ethernet. It interfaces with your product's application software and socket level TCP/IP interface.

The ESDK stack provides a logical and manageable API for interfacing to your application code and utilizes the sockets interface of your products TCP/IP stack for TCP and UDP messaging.

The ESDK Scanner Stack connection configuration can be performed locally via the stack API or via the network using the included Connection Configuration Object (CCO). This allows external tools to configure the scanner remotely.

The ESDK Stack has been successfully implemented across many platforms with an OS or no OS.

The ESDK Stack comes with 12 months of download access to the latest version and built in phone / email tech support.

Additional service options are available to assist you with EtherNet/IP requirements, design, ESDK Stack integration, pre-conformance testing and more.

Pyramid's ESDK is distributed under a royalty free software license agreement.

ESDK Features

EtherNet/IP Compatibility

- Tested with ODVA CT19
- Enables EtherNet/IP Scanner Class functionality for your product
- UCMM (unconnected) messaging Client and Server
- Class 3 (connected) messaging Client and Server
- Class 1 (I/O) connection Client and Server
- CIP Security Option Available*
- CIP Safety Option Available**

Resource Utilization and Management

- All resources initialized at startup
- No dynamic memory or thread allocation
- Stack runs on a single thread

Platform Compatibility and Portability

- Every platform specific routine is in a single set of "Platform Files," simplifying the porting process to other platforms
- Sample Platform Files provided
- Core stack source is 'C' code for portability

- Included 32 & 64 bit DLLs are compatible with Windows 7, 8.x, 10 and 11 for developing Windows and .NET applications

Supported/Included Objects

- Message router
- Connection manager
- CIP Security
- Port
- File object
- EtherNet link
- TCP/IP
- Connection configuration object
- QOS
- DLR***
- CIP Sync****
- Assembly
- Identity
- Modbus translator
- Class 0 support
- Energy object
- LLDP objects
- User Defined objects

*ESDK-SECURE Option required and an SSL you provide

**ESDK-SAFETY-ESDK Source Code Option to enable the EADK stack to work with HMS/IXXAT's CIP Safety solution purchased separately.

***Configuration object only. DLR Stack and Switch hardware not included

****Configuration object only. IEEE 1588 stack not included

EtherNet/IP™